

What is claimed is:

1. A music reproduction system comprising:

an operating terminal unit that can be carried by an
5 operator, and generates motion information in response to
motion of the operator carrying said operating terminal
unit;

a music editing apparatus that receives the motion
information from said operating terminal unit and edits
10 music data of a piece of music to be reproduced based on
the received motion information; and

a musical tone generating device that reproduces the
edited music data supplied from said music editing
apparatus to generate musical tones;

15 wherein

said music editing apparatus comprises:

a detector device that detects peak information
indicative of magnitude of the motion of the operator
from the received motion information;

20 a control information generating device that
generates music reproduction control information for
controlling music reproduction of the piece of music,
based on the peak information, when a peak value
indicated by the peak information is larger than a first
25 predetermined threshold value and a second predetermined
threshold value, and generates acoustic effect control
information for controlling at least one acoustic effect
to be applied to the piece of music, based on the peak
information, when the peak value indicated by the peak
30 information is larger than the first predetermined
threshold value and smaller than the second predetermined
threshold value;

a music data editing device that edits the music
data based on the music reproduction control information
35 and the acoustic effect control information generated by

said control information generating device; and
an output device that outputs the music data edited
by said music data editing device to said musical tone-
generating device.

5 2. A music editing system comprising:

an operating terminal unit that can be carried by an
operator, and generates motion information in response to
motion of the operator carrying said operating terminal
unit; and

10 a music editing apparatus that receives the motion
information from said operating terminal unit and edits
music data of a piece of music to be reproduced based on
the received motion information;

wherein

15 said music editing apparatus comprises:

a detector device that detects peak information
indicative of magnitude of the motion of the operator
from the received motion information;

a control information generating device that
20 generates music reproduction control information for
controlling music reproduction of the piece of music,
based on the peak information, when a peak value
indicated by the peak information is larger than a first
predetermined threshold value and a second predetermined
25 threshold value, and generates acoustic effect control
information for controlling at least one acoustic effect
to be applied to the piece of music, based on the peak
information, when the peak value indicated by the peak
information is larger than the first predetermined
30 threshold value and smaller than the second predetermined
threshold value; and

a music data editing device that edits the music
data based on the music reproduction control information
and the acoustic effect control information generated by
35 said control information generating device.

3. A music editing apparatus comprising:

a receiver device that receives, from an operating terminal unit that can be carried by an operator, motion information generated in response to motion of the operator carrying the operating terminal unit;

a detector device that detects peak information indicative of magnitude of the motion of the operator from the motion information received by said receiver device;

a music reproduction control information generating device that generates music reproduction control information for controlling music reproduction of a piece of music, based on the peak information, when a peak value indicated by the peak information is larger than a first predetermined threshold value and a second predetermined threshold value;

an acoustic effect control information generating device that generates acoustic effect control information for controlling at least one acoustic effect to be applied to the piece of music, based on the peak information, when the peak value indicated by the peak information is larger than the first predetermined threshold value and smaller than the second predetermined threshold value; and

a music data editing device that edits music data of the piece of music based on the music reproduction control information and the acoustic effect control information generated by said music reproduction control information generating device and said acoustic effect control information generating device, respectively.

4. A music editing apparatus as claimed in claim 3, further comprising:

a locus shape identifying device that identifies a shape of a locus drawn by the operating terminal unit in accordance with the motion of the operator, based on the

motion information, when the peak value indicated by the peak information is larger than the first predetermined threshold value and smaller than the second predetermined threshold value; and

5 a first storage device that stores locus shape information indicative of shapes of loci to be drawn by the operating terminal unit and acoustic effect item information indicative of acoustic effects to be applied to the piece of music, in association with each other;
10 and

 wherein said acoustic effect control information generating device searches said first storage device using the shape of the locus identified by said locus shape identifying device, as a retrieval key, to obtain
15 corresponding acoustic effect item information, and then generates the acoustic effect control information for controlling the acoustic effect indicated by the obtained acoustic effect item information, based on the peak information.

20 5. A music editing apparatus as claimed in claim 4, wherein said locus shape identifying device identifies not only the shape of the locus drawn by the operating terminal unit in accordance with the motion of the operator, but also a direction of the locus, based on the
25 motion information,

 wherein said first storage device stores the locus shape information, locus direction information indicative of directions of the loci, and the acoustic effect item information, in association with each other, and

30 wherein said acoustic effect control information generating device searches said first storage device using the shape of the locus and the direction of the locus identified by said locus shape identifying device, as retrieval keys, to obtain the corresponding acoustic
35 effect item information from the stored acoustic effect

item information, and then generates the acoustic effect control information for controlling the acoustic effect indicated by the obtained acoustic effect item information, based on the peak information.

5 6. A music editing apparatus as claimed in claim 4, further comprising a second storage device that stores peaks values of the peak information and acoustic effect level values indicative of magnitude of each of acoustic effects to be applied to the piece of music, in
10 association with each other, and

 wherein said acoustic effect control information generating device searches said second storage device using the peak information detected by said detector device, as a retrieval key, to obtain a corresponding
15 acoustic effect level value from the stored acoustic effect level values, and searches said first storage device using the shape of the locus and the direction of the locus identified by said locus shape identifying device, as retrieval keys, to obtain the corresponding
20 acoustic effect item information from the stored acoustic effect item information, and then generates the acoustic effect control information based on the obtained acoustic effect level value and the obtained acoustic effect item information.

25 7. A music editing terminal unit comprising:
 a motion information generating device that can be carried by an operator, and generates motion information in response to motion of the operator;

 a music editing device that edits music data of a
30 piece of music to be reproduced based on the motion information generated by said motion information generating device;

 a detector device that detects peak information indicative of magnitude of the motion of the operator
35 from the motion information; and

a control information generating device that generates music reproduction control information for controlling music reproduction of the piece of music, based on the peak information, when a peak value
5 indicated by the peak information is larger than a first predetermined threshold value and a second predetermined threshold value, and generates acoustic effect control information for controlling at least one acoustic effect to be applied to the piece of music, based on the peak
10 information, when the peak value indicated by the peak information is larger than the first predetermined threshold value and smaller than the second predetermined threshold value,

wherein said music editing device edits the music
15 data based on the music reproduction control information and the acoustic effect control information generated by said control information generating device.

8. A music reproduction terminal unit comprising:
a motion information generating device that can be
20 carried by an operator, and generates motion information in response to motion of the operator;

a music editing device that edits music data of a piece of music to be reproduced based on the motion information generated by said motion information
25 generating device;

a detector device that detects peak information indicative of magnitude of the motion of the operator from the motion information; and

a control information generating device that
30 generates music reproduction control information for controlling music reproduction of the piece of music, based on the peak information, when a peak value indicated by the peak information is larger than a first predetermined threshold value and a second predetermined
35 threshold value, and generates acoustic effect control

information for controlling at least one acoustic effect to be applied to the piece of music, based on the peak information, when the peak value indicated by the peak information is larger than the first predetermined
5 threshold value and smaller than the second predetermined threshold value,,

wherein said music data editing device edits the music data based on the music reproduction control information and the acoustic effect control information
10 generated by said control information generating device, and outputs the edited music data to said musical tone generating device.

9. A method of controlling a music editing apparatus that edits music data of a piece of music to be
15 reproduced, comprising the steps of:

receiving, from an operating terminal unit that can be carried by an operator, motion information generated in response to motion of the operator carrying the operating terminal unit;

20 detecting peak information indicative of magnitude of the motion of the operator from the received motion information;

generating music reproduction control information for controlling music reproduction of the piece of music,
25 based on the peak information, when a peak value indicated by the peak information is larger than a first predetermined threshold value and a second predetermined threshold value;

generating acoustic effect control information for
30 controlling at least one acoustic effect to be applied to the piece of music, based on the peak information, when the peak value indicated by the peak information is larger than the first predetermined threshold value and smaller than the second predetermined threshold value;
35 and

editing the music data based on the generated music reproduction control information and the generated acoustic effect control information.

10. A program for causing a computer to execute a
5 method of controlling a music editing apparatus that edits music data of a piece of music to be reproduced, the program comprising:

a module for receiving, from an operating terminal unit that can be carried by an operator, motion
10 information generated in response to motion of the operator carrying the operating terminal unit;

a module for detecting peak information indicative of magnitude of the motion of the operator from the received motion information;

15 a module for generating music reproduction control information for controlling music reproduction of the piece of music, based on the peak information, when a peak value indicated by the peak information is larger than a first predetermined threshold value and a second
20 predetermined threshold value;

a module for generating acoustic effect control information for controlling at least one acoustic effect to be applied to the piece of music, based on the peak information, when the peak value indicated by the peak
25 information is larger than the first predetermined threshold value and smaller than the second predetermined threshold value; and

a module for editing the music data based on the generated music reproduction control information and the
30 generated acoustic effect control information.